DOCUMENT RESUME

ED 395 320 CS 215 301

AUTHOR Goldstein, Arnold A.; Carr, Peggy G.
TITLE Can Students Benefit from Process Writing?
INSTITUTION National Center for Education Statistics (ED), Washington, DC.
REPORT NO NCES-96-845
PUB DATE Apr 96
NOTE 7p.
PUB TYPE Reports - Research/Technical (143) -- Collected Works - Serials (022)
JOURNAL CIT NAEPfacts; v1 n3 Apr 1996

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Elementary Secondary Education; Grade 4; Grade 8; Grade 12; Instructional Effectiveness; Teacher Behavior; *Writing Achievement; Writing Improvement; *Writing Processes; Writing Research; *Writing Strategies
IDENTIFIERS National Assessment of Educational Progress; *Process Approach (Writing); *Writing Development

ABSTRACT

This edition of "NAEPfacts" discusses the frequency with which process-oriented activities are taught in United States schools, and the writing performance of students whose teachers emphasize these activities. Data were drawn from the 1992 National Assessment of Educational Progress (NAEP) in Writing, which was administered to a representative national sample of approximately 7,000 fourth-grade students, 11,000 eighth-grade students, and 11,500 twelfth-grade students from about 1,500 public and private schools. Results indicated that: (1) students of teachers who always encouraged particular elements of process writing, such as planning and defining purpose and audience, were generally better writers than students of teachers who reportedly never encouraged these activities; and (2) average writing ability was higher among students whose teachers emphasized more than one process writing strategy. Findings suggest that use of pre-writing activities is associated with the highest average proficiency scores. Contains 3 notes and 3 tables of data. (RS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

NATIONAL CENTER FOR EDUCATION STATISTICS

THE NATION'S REPORT CARD

NAEP FACTS

Vol. 1, No. 3

April 1996

ED 395 320

Can Students Benefit From Process Writing?

Evidence is presented that teaching the cluster of writing techniques known collectively as "process writing" is associated with higher average writing proficiency among students. Students whose teachers always had them do such activities, especially in combination, had the highest average writing scores. Students who did certain pre-writing activities on the actual NAEP test also had higher average proficiency scores than other students.

This edition of *NAEPfacts* discusses the frequency with which process-oriented activities are taught in our Nation's schools, and the writing performance of students whose teachers emphasize these activities.

Data from the 1992 National Assessment of Educational Progress (NAEP) in Writing indicate that "teachers' encouragement of ... process-related activities was strongly related to average writing proficiency."[1] Students whose teachers encouraged certain aspects of process writing averaged higher performance on the NAEP writing assessment.

The 1992 writing assessment was administered to a representative national sample of approximately 7,000 4th-grade students, 11,000 8th-grade students, and 11,500 12th-grade students from about 1,500 public and private schools across the country. NAEP assessed students' ability to accomplish three purposes for writing–informative, persuasive, and narrative. Students in grade 4 were asked to respond to two 25-minute writing tasks; students in grades 8 and 12 were asked to respond to either two 25-minute tasks or one 50-minute task. Preceding each task, students were given a blank page with instructions to encourage pre-writing. Students, teachers, and administrators in all three grades were also asked about instructional content; instructional practices; school and teacher characteristics; school conditions; and student background, student activities, and home environment.

What Is Process Writing?

"Process writing" refers to a broad range of strategies that include pre-writing activities, such as defining the audience, using a variety of resources, planning the writing, as well as drafting and revising. These activities, collectively referred to as "process-oriented instruction," approach writing as problem-solving. The NAEP report emphasizes these aspects of writing. The assessment included writing assignments that encouraged sustained involvement over a period of time, allowing multiple drafts and time for reflection and revision.

Writing has been described as a recursive process, in which the writer plans, translates ideas into language, and reviews what has been written. The review could lead to further planning and translating as additional ideas come to mind.[2] Studies concur that weaker writers spend little time planning, while skilled writers do more planning and reviewing.[3] More skilled writers, furthermore, pay more attention to content and organization, while weaker writers are more preoccupied with the mechanics of writing, especially spelling. Good writers are found to use a longer pre-writing period than average writers.

U S DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it
☐ Minor changes have been made to improve reproduction quality
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

CS215301

BEST COPY AVAILABLE

Teachers' Encouragement of Process Writing

Students in grades 8 and 12 (but not grade 4) were asked the extent to which their teachers asked them to do the following activities:

- Plan their writing;
- Make a formal outline before they write;
- Define their purpose and audience;
- Use sources or resources other than their textbook; and
- Write more than one draft of a paper.

Table 1 summarizes the results for each of these categories.

About half or more of 8th- and 12th-grade students reported their teachers always asked them both to plan their writing and to write more than one draft. High percentages of students (about 70 percent of 8th-graders and 76 percent of 12th-graders) also reported their teachers always asked them either to plan their writing or to write more than one draft, or to do both. On the other hand, about one-fourth of students (29 percent of 8th-graders and 24 percent of 12th-graders) were never asked to do either of those activities.

Average NAEP proficiency scores associated with the various techniques are also shown in table 1. The highest possible score on the NAEP scale is 500. The data indicate that students who reported being always asked to do certain elements of a structured approach to writing had higher average NAEP scores than those who reported never being asked to do them. For example, 8th-graders who reported always being asked to plan their writing had an average score of 270, compared with only 248 for those never asked to plan their writing. Large differences in average writing scores were also evident between 8th-graders who reported always being asked to define the purpose and audience, to use sources or resources other than the textbook, or to write more than one draft, and those never asked to do these activities. Similar differences appeared for 12th-graders for these activities. In the case of making a formal outline before writing, however, the difference was much smaller (as for 8th-graders) or nonexistent (12th-graders).

Students who reported they were asked both to plan their writing and write multiple drafts all the time had higher average proficiency scores than students who always did one or the other but not both of these activities. Eighth-grade students who reported always being asked both to plan their writing and write more than one draft averaged 274, compared with 262 for those asked to always do one or another of these activities. For 12th-graders the corresponding scores were 296 and 286. Students asked to do neither of these activities always had the lowest average scores, 248 for 8th-graders and 272 for 12th-graders.

Additional evidence of the strong relationship between average writing proficiency and the number of process-related activities can be seen in figure 1 and table 2. Figure 1 shows the average NAEP writing scores for 8th- and 12th-grade students who reported their teachers always asked them to do none, some, or all of the following aspects of the writing process: planning, defining the audience and purpose, using outside resources, and writing more than one draft. Average writing scores improved as the number of these activities students reported being asked to do increased from 1 to 3. Only 39 percent of 12th-grade students reported their teachers always asked them to do three or four of these activities (table 2).

Use of Pre-Writing Techniques in the NAEP Assessment

During the assessment, students were given a blank page before each writing task, which they were encouraged to use for pre-writing activities. The instructions informed students: "You may use this blank space to make notes and organize your ideas." Students who used this page were compared to those who did not. Evidence of the positive association between process-oriented activities and writing performance is directly available from the test. The types of activities students performed on the blank page are summarized in table 3 under five categories: notes or drawings unrelated to the task; lists or outlines of the writing; diagrams used to organize ideas; different versions of the task than the one actually used on the response page; and first drafts of the final response.

The percentage of students who showed evidence of pre-writing increased from grade 4 to the higher grades. About 29 percent of 4th-graders did some form of pre-writing, as did 35 percent of 8th-graders, and 46 percent of 12th-graders. The most frequent form of pre-writing activity in all 3 grades was making lists or outlines.

Notably, the students in all three grades tested had appreciably higher average scores if they showed any evidence of pre-writing activities on the blank pages they were given for the purpose. As shown in table 3, for

Table 1.— Students' reported frequency and average proficiency, by teachers' encouragement of process writing: Grades 8 and 12

Teachers' encouragement	Percent of students			Average proficiency scores		
	Always	Sometimes	Never	Always	Sometimes	Never
How often does your English teacher ask you to do the following:						
Plan your writing						
Grade 8	55	38	8	270	253	248
Grade 12	63	30	7	292	278	269
Make a formal outline before you write						
Grade 8	32	46	22	264	262	258
Grade 12	33	49	19	285	288	285
Define your purpose and audience						
Grade 8	27	45	28	268	261	257
Grade 12	43	39	19	293	284	278
Use sources or resources other than your textbook						
Grade 8	37	51	12	265	262	254
Grade 12	45	46	9	288	288	272
Write more than one draft						
Grade 8	49	40	12	269	257	248
Grade 12	52	37	11	293	281	272
	Both	One or the other	Neither	Both	One or the other	Neither
Always plan and draft						
Grade 8	32	38	29	274	262	248
Grade 12	39	37	24	296	286	272

NOTE: The standard errors of the estimated percentages range from 0.4 to 1.1; standard errors of the proficiencies range from 0.9 to 2.7. It can be said with 95 percent confidence for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference. Percentages may not total 100 percent due to rounding error.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Writing Assessment.

example, 12th-graders who engaged in pre-writing averaged 295, compared with 278 for those who did not. In addition, students in all three grades who used lists or outlines, or who used diagrams, performed at higher levels than those who engaged in the other pre-writing activities listed in the table. The high average scores of students who used lists or outlines on the NAEP indicates the utility of this organizing tool for students, especially given the time constraint imposed by the NAEP test. It is not clear, however, whether making lists *or* outlines contributed the most to higher proficiency, since students who reported their teachers always encourage use of formal outlines (see table 1) did little or no better than their counterparts who reported their teachers never encourage their use. It is possible, though, that some students benefit from using informal outlines or lists of topics.

Figure 1.— Average proficiency by number of aspects always encouraged (student reports)

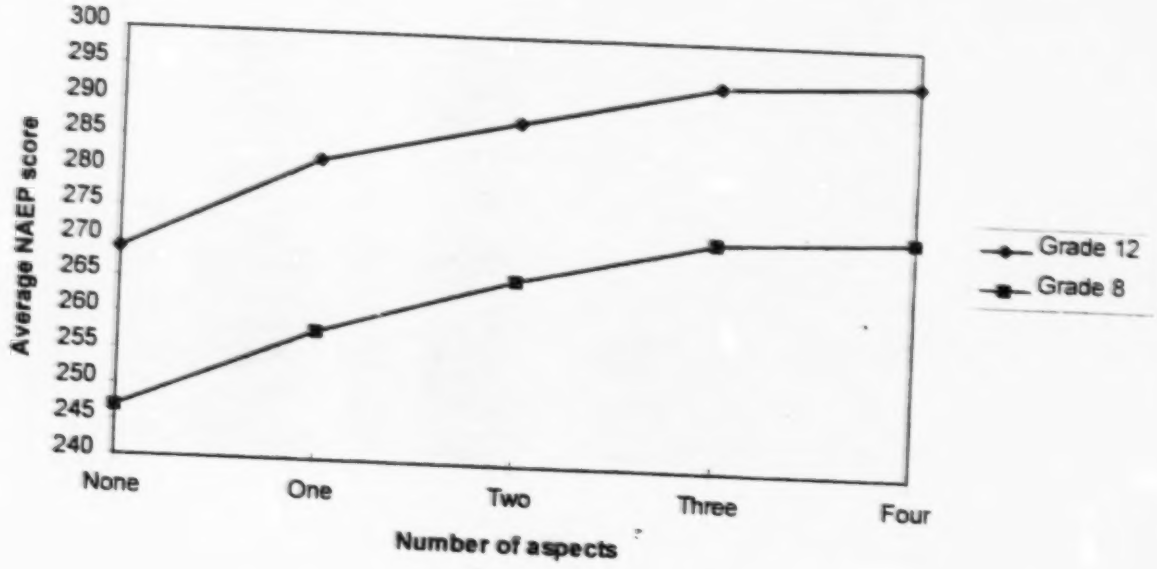

Table 2.— Percent of students, by number of aspects always encouraged

Grade	Number				
	0	1	2	3	4
Grade 8	20	27	28	18	7
Grade 12	15	20	26	24	15

Table 3.— Percent and average proficiency, by visible planning on students responses to NAEP assessment writing tasks: Grades 4, 8, and 12

Evidence of Planning	Percent of students			Average proficiency		
	Grade 4	Grade 8	Grade 12	Grade 4	Grade 8	Grade 12
No pre-writing	71	65	54	221	258	278
Pre-writing evident	29	35	46	230	273	295
Types of pre-writing:						
Unrelated notes or drawings	3	2	3	218	258	283
Lists or outlines	14	25	38	237	277	299
Diagrams	4	3	2	231	274	294
Different versions	1	1	0	218	259	—
First drafts	8	5	4	224	262	279

NOTE: The standard errors of the estimated percentages range from 0.1 to 1.3; standard errors of the proficiencies range from 1.1 to 4.8. It can be said with 95 percent confidence for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In comparing two estimates, one must use the standard error of the difference. Percentages may not total 100 percent due to rounding error.

— Sample size insufficient to permit a reliable estimate.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Writing Assessment

Discussion

Are process writing techniques helpful for effective writing? Evidence from the 1992 NAEP assessment in writing supports research in the field that several process writing techniques are associated with higher writing proficiency skills. In addition, NAEP provides evidence about which techniques have the greatest potential for positive outcomes.

Students of teachers who always encourage particular elements of process writing, such as planning and defining purpose and audience, were found to be generally better writers than students of teachers who reportedly never encourage these activities. Similarly, average writing ability is higher among students whose teachers emphasize more than one process writing strategy. The 1992 NAEP assessment offered direct evidence that use of pre-writing activities is associated with the highest average proficiency scores. There is some conflicting evidence, however. The writing proficiency of students who reported their teachers always encourage various pre-writing activities (table 1) attained higher scores than other students. Yet, on the 1992 NAEP assessment, students who actually used unrelated notes or drawings, wrote different versions, or wrote first drafts performed about the same as those who did no pre-writing. Only those who used lists or outlines, or diagrams, outperformed those who showed no evidence of pre-writing. Perhaps students' actual practice in a test situation does not always conform to what is taught, especially in response to time pressure or low motivation (the NAEP has no individual consequences for the student).

The focus of process-oriented writing instruction is to stimulate students to think about their writing and reflect on their ideas. Writing is an individual activity, and students will often benefit by using some strategies and not others. While process-oriented instruction may not lead to better writing in all students, the use of techniques such as planning and preparation of more than one draft is related to higher performance.

Notes

[1]Arthur N. Applebee, Judith A. Langer, Ina V.S. Mullis, Andrew S. Latham, Claudia A. Gentile, *NAEP 1992 Writing Report Card*, National Center for Education Statistics, Report No.l 23–W01 (Washington, DC.: U.S. Government Printing Office, June 1994), p. 178.

[2]Linda Flower and John R. Hayes, "The Cognitive Process Theory of Writing," *College Composition and Communication*, 32, 365–387 (1981).

[3]George Hillocks, Jr., *Research on Written Composition* (Urbana, IL: National Conference on Research in English, 1986), Chapter 1.

NAEPfacts is a new series that briefly summarizes findings from the National Assessment of Educational Progress (NAEP). The series is a product of the National Center for Education Statistics (NCES), Gary W. Phillips, Associate Commissioner for Education Assessment. This issue was written by **Arnold A. Goldstein** and **Peggy G. Carr**. To order other NAEP publications, call Bob Clemons at 202–219–1690.

All differences reported are statistically significant at the .05 level with adjustments for multiple comparisons. Associations between instructional variables and performance do not imply direct causation. The effectiveness of educational approaches could result from students' prior learning, their receptivity, teacher preparedness, having access to the necessary resources, and other factors.

United States
Department of Education
Washington, DC 20208–5653

Official Business
Penalty for Private Use, $300

Postage and Fees Paid
U.S. Department of Education
Permit No. G–17

FIRST CLASS